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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,313	04/18/2006	Geert Jan Schrijen	NL 031237	4472
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EXAMINER				
BITAR, NANCY				
ART UNIT		PAPER NUMBER		
2624				
MAIL DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/576,313

**Applicant(s)**

SCHRIJEN ET AL.

**Examiner**

NANCY BITAR

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CD/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Examiner Notes**

1. Examiner cites particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clarke et al (The Untrusted Computer Problem and Camera-Based Authentication) in view of McNair et al (US 5,450,491).

As to claim 1, Clarke et al teaches the method of verifying the authenticity of an image (1, 1', 1'') being rendered on a display screen (10) using a graphical representation of an authentication code (2, 2', 2'') associated with the image, said graphical representation also being rendered on the display screen, the method comprising the steps of: producing an electronic representation of the image, and deriving the authentication code from its graphical representation (Messages are sent from P in encrypted form, along with an encrypted one time password. They are protected by a nonce2 and a MAC.3 D receives the message from C, checks its authenticity, and passes it on to U if the checks succeed, section 4.1, page 118), wherein both the step of producing an electronic representation of the image and the step of deriving the authentication code from its graphical representation involve the use of a scanner (20) having an array of photosensitive elements (21), which array can be moved relative to the image ( note that transparencies during electronic transaction suggest that the on-screen image must be finely scaled and moved before it can be made to line up with the transparency precisely enough; this gives away the transparency's position, section 4.2, page 119). While Clarke et al. meets a number of the limitations of the claimed invention, as pointed out more fully above, Clarke fails to specifically teach the scanner (20) having an array of photosensitive elements .Specifically, McNair et al et al. teaches the use of handheld scanner where a POS terminal 301 is outfitted with a conventional bar code reader 303, which receives its input from a bar code scanner 305. When the LCD 107 on the authenticator card is scanned with scanner 305, a digital signal representing the bar code displayed on the card at that time is received in POS terminal 301 ( see figure 3, note that it is well know in the art that scanner contains diode ) .Because the handheld scanner will provides a simple interface and will increase the accuracy of embedded codes it

would have been obvious to one of ordinary skill in the art to use the handheld scanner of McNair et al. in Clarke et al method in order to verify the authenticity of an image and protects against tampering and security attacks. Therefore, the claimed invention would have been obvious to one of ordinary skill in the art at the time of the invention by applicant.

As to claims 2-3, McNair et al. teaches the method according to claim 1, wherein the scanner (20) is a hand-held and linear scanner (scanner 305, figure 3).

As to claim 4, Clarke et al teaches the method according to claim 1, wherein the step of producing an electronic representation of the image and the step of deriving the authentication code from its graphical representation together involve a single scanning motion ( note that a one time secret transparencies during each electronic transaction is used, section 4.2).

As to claim 5, Clarke et al teaches the method according to claim 1, wherein the display screen (10) provides a scanning prompt after the image is changed (If all checks succeed it lights a green light, and displays the decrypted one-time password on a small LCD display, see “ protocol” , section 5.1).

As to claim 6, Clarke et al teaches the method according to claim 1, wherein the image (1, 1', 1'') comprises alphanumeric characters (The Proxy sends information, in the form of an image containing text, to the untrusted computer, see paragraph “ protocol”, page 122).

As to claim 7, Clarke et al teaches the method according to claim 6, wherein the image (1, 1', 1'') comprises financial information (She uses it to review the stock market and place orders, see paragraph “ Introduction”, page 124).

As to claim 8, Clarke et al teaches the method according to claim 1, wherein the graphical representation of the authentication code (2, 2', 2'') comprises guide marks (3) for guiding the scanner (this appears as an image, with a strip of random-looking data at the bottom, note that random looking data or symbols are considered guide marks, see paragraph " protocol", section 5.1).

As to claim 9, Clarke et al teaches the method according to claim 1, wherein the step of producing an electronic representation of the image involves optical character recognition (see section 5.2, note that the OCR algorithm must detect any change in the image that would result in the user seeing a different character from the one that was originally sent by the proxy).

As to claim 10, Clarke et al teaches the method according to claim 1, further comprising the steps of: calculating a further authentication code on the basis of the electronic representation of the image, and comparing the derived authentication code and the calculated further authentication code (The proxy checks the nonce, calculates the expected MAC and compares it with the received MAC, see section "protocol", page 122).

Claims 11-16 differ from claims 1-10 only in that claims 1-10 are method claims whereas, claims 11-16 are system claim. Thus, claims 11-16 are analyzed as previously discussed with respect to claims 1-10 above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NANCY BITAR whose telephone number is (571)270-1041. The examiner can normally be reached on Mon-Fri (7:30a.m. to 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew W. Johns/  
Primary Examiner, Art Unit 2624

Nancy Bitar

3/24/2008